

SUBSTITUTE SPECIFICATION

TITLE OF THE INVENTION

Nectarine Tree 'Mesembrine'

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CROSS REFERENCE TO RELATED APPLICATIONS

None

PRIORITY CLAIM

10 This application claims priority of U.S. Provisional patent application Ser. No.
60/404,079 filed August 15, 2002.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

None

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LATIN NAME OF THE GENUS AND SPECIES OF THE PLANT CLAIMED

Prunus persica L. Batsch

VARIETY DENOMINATION

20 'Mesembrine'

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

FIG. 1 shows the tree and blossoms of 'Mesembrine';

FIG. 2 shows the blossoms of 'Mesembrine';

FIG. 3 shows the leaves of 'Mesembrine'; and

FIG. 4 shows the fruit of 'Mesembrine'.

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BRIEF DESCRIPTION OF THE VARIETY:

The new nectarine tree 'Mesembrine' originated as a seedling resulting from a controlled cross of 'Jalousia' x 'Summergrand' (seed parent, not patented) and 'Fantasia' (pollen parent, not patented). Originally bred and tested by the Institut National de la Recherche Agronomique (INRA) in France, 'Mesembrine' has been asexually propagated by grafting in France and in Parker, Washington, USA, and has been observed to remain true to type over successive asexually propagated generations.

10 'Mesembrine' was selected for its broad oblate shape and pleasant sub-acid flavor. While similar in many respects to 'S 6816' (plant patent pending), the fruit of 'Mesembrine' matures one to two weeks later. It has also been observed that the leaves of 'Mesembrine' are longer than those of 'S 6816.'

DETAILED BOTANICAL DESCRIPTION OF THE VARIETY:

20 The following detailed botanical description is based on observations of four year old trees made during the 2004 growing season at Parker, Washington. The test trees were grown on 'Lovell' (unpatented) rootstock. All colors are described according to the Royal Horticultural Society Colour Chart. It should be understood that the characteristics described will vary somewhat depending upon

cultural practices and climatic conditions, and can vary with location and season. Quantified measurements are expressed as an average of measurements taken from a number of individual plants of the new variety. The measurements of any individual plant, or any group of plants, of the new variety may vary from the stated average.

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Tree

Type Non-spur type

Vigor Medium

Habit Upright

10 Size Width 2.2 m; height 3.9 m

Production Heavy

Trunk

Size Diameter 34.1 at base

15 Bark Texture varies; color grey 201D on very rough bark;
greyed-purple 183A on rough bark; greyed-purple 184A on
smooth bark

Lenticels Large, prominent, length 0.8 to 1.1 cm; 10 per square inch;
color orange-white 159A

Flowering Branch

20 Size Length 50.8 cm; diameter 1.6 cm

Texture Smooth

Length of internodes Medium, 2.2 to 2.5 cm

Color Greyed-purple 184A

Anthocyanin coloration Present

Intensity of anthocyanin coloration Medium

Flowers

- 5 Abundance of flower buds Medium
- Distribution of flower buds Generally in groups of two or more
- Time of beginning of flowering Bud burst March 18; bloom period March 21 to April 6, 2005
- 10 Buds Length 0.8 to 0.9 cm; elongated with rounded tip; color red-purple 59A, tip red-purple 63B; hardy
- Flower shape Rosaceous
- Fragrance Fragrant, not sweet
- Flower size Diameter 3.6 to 3.9 cm
- Calyx color (open flower before falling of petals) Orange
- 15 Petals Quantity 5; overlapping; large, length 1.5 to 1.6 cm, width 1.4 to 1.5 cm; margins ruffled; petal texture smooth; color upper surface red-purple 62D, lower surface red-purple 61D
- Number of pistils Always one
- 20 Position of stigma compared to anthers Below
- Stamen length compared to petals Shorter
- Anthers Size 0.05 cm; color greyed-red 180A; pollen present, yellow 1A

	Pubescence of ovary	Absent
	Stamen	Quantity 36; length 1.0 to 1.2 cm; color red-purple 62D
	Filament	Size 0.9 to 1.1 cm
	Pistil	Size 1.0 to 1.2 cm; color yellow 1A
5	Sepals	Length 0.5 to 0.6 cm; width 0.3 to 0.4; color red-purple 59A
	Fertility	Self-fertile

Leaves

	Time of leaf bud burst	Medium
10	Size	Medium, length 13.0 cm, width 4.0 cm
	Ratio length/width	Medium
	Profile	Flat
	Curvature of tip	Recurved downward
	Angle at base	Nearly right angle
15	Angle at top	Medium
	Anthocyanin coloration	Absent
	Color	Yellow-green 146A with yellow-green 146D spots

Petiole

	Length	Medium, 1.5 cm
20	Nectaries	Present
	Shape of nectaries	Kidney-shaped
	Number of nectaries	Normally two

Fruit

	Size	Small, diameter 7.0 cm; height 4.0 cm
	Shape in profile view	Broad oblate
	Shape of tip	Bowl shaped depressed
5	Symmetry when cut along suture	Symmetric
	Suture	Marked
	Depth of petiole cavity	1.5 cm
	Width of petiole cavity	2.5 cm
	Color of skin	Ground color orange-red 34B; over color red-purple 59A
10	Extension of anthocyanin coloration of skin	Very large
	Pubescence	Absent
	Lenticels	Absent
	Thickness of skin	Medium
	Adherence of skin	Medium
15	Firmness of flesh	Very firm
	Anthocyanin coloration directly under skin	Absent
	Anthocyanin coloration around the stone	Present
	Texture of the flesh	Not fibrous, fine, melting
	Sugar content of flesh	High, Brix 13.5
20	Color of flesh	Yellow 16C; color near seed yellow N30A
	Flavor	Sub-acid, skin slightly tart

Stone

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	Size compared to fruit	Small, diameter 2.5 cm
	Shape	Flat; ridged; pitted
	Color	Red-purple S9B
	Likelihood of stone to split	Absent or very weak
5	Adherence to flesh	Yes
	Degree of adherence to flesh	Medium

Maturity

	Bearing	Annual
	Time of maturity	Early (August 4, 2004 at Parker, Washington)
10	Duration	Multiple pickings
	Preharvest drop	Absent or minimal
	Time of falling of leaves	Medium
	Resistance to pests and diseases	None noted